

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of the claims:

1-25. (canceled)

26. (previously presented) A method of fabricating ordered patterns of nanoscale objects on a substrate surface comprising:

applying a resist layer to a substrate surface;

stamping an imprint mold having nanoscale teeth onto the resist layer;

releasing the imprint mold to expose a template having a template surface formed into the imprint resist layer and having nanoscale openings formed therein to receive nanoscale objects; and

depositing a plurality of discrete nanoscale objects onto the template such that the nanoscale objects are received within said nanoscale openings, said nanoscale objects are selected from the group consisting of nanoparticles, nanowires, nanorods, nanotubes, proteins, and DNA.

27. (previously presented) A method according to Claim 26, further comprising selectively removing residual layer material from the substrate surface to expose portions of the substrate surface, and wherein at least some nanoscale objects are in contact with the exposed substrate surface.

28-30. (canceled)

31. (previously presented) A method according to Claim 26, further comprising:

removing the nanoscale objects that remain outside of the openings with a chemical wash.

32. (original) A method according to Claim 26, wherein the nanoscale openings are ordered in a pattern with respect to at least one of the group consisting of size, shape, orientation, pattern, and position.

33-37. (canceled)

38. (previously presented) A method according to Claim 26, further comprising attaching DNA ogligomers to the nanoscale objects, and wherein the nanoscale objects are proteins.

39-40. (canceled)

41. (original) A method according to Claim 26, wherein the stamping is performed by a step and flash lithographic method.

42-72. (canceled).

73. (previously presented) A method according to Claim 26, further comprising forming a first set of wires below the template, and forming a second set of wires above the template, and wherein the nanoscale objects are conductive and provide electrical connection between the first and second sets of wires.

74. (canceled).

75. (previously presented) A method of forming a nanoscale object on a substrate surface comprising:

- applying a resist layer to a substrate surface;
- imprinting a nanoscale opening into the resist layer with a mold;
- removing the mold to expose said nanoscale opening in said resist layer, said nanoscale opening sized to receive a nanoscale object therein; and
- depositing a nanoscale object onto the resist such that the nanoscale object is received within said nanoscale opening.

76. (previously presented) The method according to Claim 75 wherein said nanoscale object is selected from the group consisting of nanoparticle, nanowires, nanorods, nanotubes, proteins, and DNA.

77. (previously presented) The method according to Claim 75 wherein a single, discrete nanoscale object is received within a single, discrete nanoscale opening.

78. (previously presented) The method according to Claim 75 wherein a plurality of nanoscale objects are received within a plurality of nanoscale openings.

79. (previously presented) The method according to Claim 75 wherein said nanoscale object received within said nanoscale opening is in direct contact with said substrate surface.

80. (previously presented) The method of Claim 75 further comprising attaching a DNA ogligomer to the nanoscale object.

81. (previously presented) The method according to Claim 75 wherein
the nanoscale object is a protein.